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EXAMINER
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JERABEK, KELLY L

ART UNIT	PAPER NUMBER
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2622

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/22/2007	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 03/22/2007.

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<b>Office Action Summary</b>	Application No. 10/047,022	Applicant(s) ITO, TAKEYOSHI	
	Examiner Kelly L. Jerabek	Art Unit 2622	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 04 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-23, 25 and 27-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6 and 40 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-10, 12-23, 25, 27-37, 39, 41 and 43 is/are rejected.
- 7) ☒ Claim(s) 38, 42 and 44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 1/4/2007 have been fully considered but they are not persuasive.

### **Response to Remarks:**

Applicant's arguments regarding amended claim 1 (Amendment page 28) state that the combination of the Okino and Aoi references does not teach or suggest the newly added claim limitations "wherein the indicating device indicates the external device communication function when a communication with an external device is performed, and wherein the indicating device indicates the moving-image capturing function when the communication with the external device is not performed and the moving-image capturing is performed". The Examiner respectfully disagrees. The Okino and Aoi references are being applied to amended claim 1 as follows:

Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice

recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). However, although the Okino reference discloses all of the above limitations it fails to state that the camera is capable of performing external device communication and therefore also does not state that the indicating device indicates that an external device communication is taking place when the camera performs external device communication.

Aoi discloses a digital camera capable of communicating with an external device and including a display (54) capable of displaying the status of various camera operations. Aoi discloses that a display portion (54) which may be an LCD or an LED provides a continuous-photographing indication, a self-timer indication and a communication I/F operation indication (page 3, paragraphs 68-70). Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide an external device communication indication as disclosed by Aoi. Doing so would provide a means for notifying a user of an external device communication that is in progress.

Although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a

different LED indication for indicating an external device communication and for indicating a moving image capturing function. However, Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38). Thus, it can be seen that Okino teaches prioritizing LED flashing times in order to provide a different indication corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the moving-image capturing function when the communication with an external device is not performed and the moving-image capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera.

Applicant's arguments regarding amended claim 1 (Amendment page 29) state that in the Okino reference images may be captured without activating the voice recording mode, and thus, there would be no indication of image capturing displayed on the LED (5). Accordingly, the Okino reference does not disclose indicating moving-image capturing. The Examiner respectfully disagrees. Okino discloses a digital

camera including an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously). Okino further states that the indicating device (LED 5) provides an indication of audio recording when the camera records audio signals (col. 3, lines 38-65). Therefore, since it can be seen that the camera is capable of recording audio and video synchronously and the LED (5) provides an indication when audio is recorded the LED (5) provides an indication of moving-image capturing (video capture) when the audio and video are recorded synchronously. The claim does not require that the indicating device provide an indication every time that the camera performs moving image capturing. Therefore, since the Okino reference states that the camera is capable of recording audio and video synchronously and the LED (5) provides an indication when audio is recorded, the Okino provides an indication (LED 5) of moving-image capturing (video capture) whenever the audio and video are recorded synchronously. Thus, it can be seen that Okino teaches indicating moving-image capturing.

Applicant's arguments regarding amended claim 1 (Amendment pages 29-30) state that the combination of the Okino and Aoi references does not teach or suggest the feature of "wherein the indicating device indicates the moving-image capturing function when the communication with the external device is not performed and the

moving-image capturing is performed". The Examiner respectfully disagrees. First, the Examiner would like to note that the newly added limitation "wherein the indicating device indicates the moving-image capturing function when the communication with the external device is not performed and the moving-image capturing is performed" does not prohibit an indication of moving-image capturing when external device communication is performed. Therefore, any indication of moving-image capturing when moving-image capturing is performed and external device communication is not performed will meet the limitations of the claim. Thus, the Examiner is rejecting the claim as follows:

Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). However, although the Okino reference discloses all of the above limitations it fails to state that the camera is capable of performing external device communication and therefore also does not state that the

indicating device indicates that an external device communication is taking place when the camera performs external device communication.

Aoi discloses a digital camera capable of communicating with an external device and including a display (54) capable of displaying the status of various camera operations. Aoi discloses that a display portion (54) which may be an LCD or an LED provides a continuous-photographing indication, a self-timer indication and a communication I/F operation indication (page 3, paragraphs 68-70). Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide an external device communication indication as disclosed by Aoi. Doing so would provide a means for notifying a user of an external device communication that is in progress.

Although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a different LED indication for indicating an external device communication and for indicating a moving image capturing function. However, **Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38).** Thus, it can be seen that Okino teaches prioritizing LED flashing times in order to



**provide a different indication corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the moving-image capturing function when the communication with an external device is not performed and the moving-image capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera.**

Applicant's arguments regarding independent claims 5, 8 and 30 and all of their respective dependent claims (Amendment pages 30-33) are substantially the same as the arguments above. Therefore, the responses given above also apply to these claims.

**Claims 1-4, 8-10, 15-20, 27-28, 30-31 and 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. US 5,214,516 in view of Aoi et al. US 2003/0169349.**

Re claim 1, Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is

capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). However, although the Okino reference discloses all of the above limitations it fails to state that the camera is capable of performing external device communication and therefore also does not state that the indicating device indicates that an external device communication is taking place when the camera performs external device communication.

Aoi discloses a digital camera capable of communicating with an external device and including a display (54) capable of displaying the status of various camera operations. Aoi discloses that a display portion (54) which may be an LCD or an LED provides a continuous-photographing indication, a self-timer indication and a communication I/F operation indication (page 3, paragraphs 68-70). Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide an external device communication indication as disclosed by Aoi. Doing so would provide a means for notifying a user of an external device communication that is in progress.

Although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a different LED indication for indicating an external device communication and for indicating a moving image capturing function. However, Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38). Thus, it can be seen that Okino teaches prioritizing LED flashing times in order to provide a different indication corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the moving-image capturing function when the communication with an external device is not performed and the moving-image capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera.

Re claim 2, Okino discloses the indicating device indicates the operation situation of the second function by at least one of lighting, blinking and emitting colors (col. 3, lines 53-65; col. 4, lines 15-23).

Re claim 3, Okino discloses the second function further includes a voice recording function (col. 3, lines 53-65; col. 4, lines 15-23).

Re claim 4, Okino discloses the indicating device indicates the operation situation of the second function by at least one of lighting, blinking and emitting colors (col. 3, lines 53-65; col. 4, lines 15-23).

Re claim 8, Okino discloses a method for indicating a plurality of functions of a camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). However, although the Okino reference discloses all of the above limitations it fails to state that the camera is capable of performing external

device communication and therefore also does not state that the indicating device indicates that an external device communication is taking place when the camera performs external device communication.

Aoi discloses a digital camera capable of communicating with an external device and including a display (54) capable of displaying the status of various camera operations. Aoi discloses that a display portion (54) which may be an LCD or an LED provides a continuous-photographing indication, a self-timer indication and a communication I/F operation indication (page 3, paragraphs 68-70). Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide an external device communication indication as disclosed by Aoi. Doing so would provide a means for notifying a user of an external device communication that is in progress.

Although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a different LED indication for indicating an external device communication and for indicating a moving image capturing function. However, Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38). Thus, it can be seen that Okino

teaches prioritizing LED flashing times in order to provide a different indication corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the moving-image capturing function when the communication with an external device is not performed and the moving-image capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera.

Re claim 9, Okino discloses that the indicating device is an LED. (5).

Re claim 10, Okino discloses the step of indicating self-timer image-capturing function includes: operating the indicating device in a continuous manner for a first predetermined period of time when it is determined that a shutter button of the camera is fully depressed (col. 3, lines 43-65, first flash from LED); operating the indicating device in a blinking manner for a second predetermined period of time after the first predetermined period of time has elapsed (col. 3, lines 43-65, LED flashes at five seconds and seven seconds); and operating the indicating device in the continuous manner for a third predetermined period of time after the second predetermined period

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of time has elapsed (col. 3, lines 43-65, LED remains emitting during the last second of recording).

Re claims 15, 17 and 19, Okino discloses the step of indicating the moving image-capturing function includes: operating the indicating device in a blinking manner when it is determined that the camera is in a moving image recording mode (col. 3, lines 43-65, the voice recording mode, wherein audio and video are recorded synchronously, col. 1, lines 45-52); and ceasing operation of the indicating device when it is determined that the camera is no longer in the moving image recording mode (col. 3, lines 61-62) because the LED turns off when recording has finished.

Re claims 16 and 18, Okino discloses that it is determined that the camera is no longer in the moving image recording mode or the audio recording mode when a predetermined time has passed since a start of the moving image recording mode (col. 3, lines 1-7).

Re claim 20, Okino discloses it is determined that the camera is no longer in the voice memo mode when a back switch of the camera is on (fig. 2, element 2) and a predetermined time has passed since a start of the moving image recording mode (col. 3, lines 1-7).

Re claim 27, it is inherent that the steps of indicating communications processing, audio recording and voice memo processing are performed when the digital camera has already been externally turned on because the camera must be on in order to perform data processing operations.

Re claim 28, Okino states that the indicating device is configured to indicate the moving-image capturing function by blinking when the camera is in a moving-image recording mode (col. 3, lines 52-65) and by ceasing blinking when the camera is no longer in the moving image recording mode (col. 3, lines 61-62).

Furthermore, Okino discloses the camera is no longer in the moving image-capturing function when a predetermined time has passed since a start of the moving image recording mode since voice recording continues for a time interval (col. 3, lines 1-7 and 43-52) and the audio is synchronous with the video (col. 1, lines 45-51).

Re claim 30, Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is



performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). Okino also states that the indicating device (5) may be used as a display for checking the battery (col. 4, lines 32-38). However, although the Okino reference discloses all of the above limitations it fails to specifically state that the indicating device indicates that a battery charging is taking place when the camera performs battery charging.

Aoi discloses a digital camera including a display (54) capable of displaying the status of various camera operations. Aoi discloses that an LED displayed on the display portion (54) a battery charging state indication (page 3, paragraph 70). Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide a battery charging state indication as disclosed by Aoi. Doing so would provide a means for notifying a user of a battery charging operation that is in progress.

Re claim 31, Okino states that the indicating device (5) is configured to indicate that the self-timer image-capturing is taking place by lighting or blinking (col. 3, lines 53-65).

Re claim 33, Aoi discloses a digital camera that is capable of performing external device communication and also states that the display portion (54) is configured to indicate that the external device communication is taking place when the camera performs external device communication (page 3, paragraphs 68 and 90).

Re claim 34, although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a different LED indication for indicating an external device communication and for indicating a self-timer image-capturing function. However, Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38). Thus, it can be seen that Okino teaches prioritizing LED flashing times in order to provide a different indication corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the self-timer image-capturing function when the communication with an external device is not performed and the self-timer image-capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera.

Re claim 35, although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a different LED indication for indicating an external device communication and for indicating a moving image capturing function. However, Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38). Thus, it can be seen that Okino teaches prioritizing LED flashing times in order to provide a different indication corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the moving-image capturing function when the communication with an external device is not performed and the moving-image capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera.

Re claim 36, Okino states that the digital camera is capable of performing voice recording and the indicating device (5) is configured to indicate the voice recording is taking place when the camera performs the voice recording (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously).

**Claims 5, 7, 12-14, 21-23, 25, 37, 39, 41 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. in view of Aoi et al. and further in view of Ohmura et al. US 2003/0011702.**

Re claim 5, Okino discloses a digital camera, comprising: an indicating device (5) arranged on a front of the digital camera (figure 5A), wherein the digital camera is capable of performing a self-timer image capturing function (col. 3, lines 53-65; col. 4, lines 15-23) and a moving image-capturing function (col. 1, lines 45-52; col. 4, lines 15-23; the voice recording mode records audio and video synchronously) and wherein the indicating device (5) indicates the self-timer image-capturing when the camera is performing self-timer image-capturing and indicates the moving image-capturing (recording video and audio synchronously) is taking place when the camera is performing moving image-capturing (col. 3, lines 53-65; col. 4, lines 15-23). However, although the Okino reference discloses all of the above limitations it fails to state that the camera is capable of performing external device communication and therefore also does not state that the indicating device indicates that an external device

communication is taking place when the camera performs external device communication.

Aoi discloses a digital camera capable of communicating with an external device and including a display (54) capable of displaying the status of various camera operations. Aoi discloses that a display portion (54) which may be an LCD or an LED provides a continuous-photographing indication, a self-timer indication and a communication I/F operation indication (page 3, paragraphs 68-70). Therefore, it would have been obvious for one skilled in the art to have been motivated to use the indicating device (5) of the camera disclosed by Okino to provide an external device communication indication as disclosed by Aoi. Doing so would provide a means for notifying a user of an external device communication that is in progress.

Although the combination of the Okino and Aoi references provides the teaching of a single indicating device located on the front of a camera for indicating a self-timer image capturing function, a moving-image capturing function and an external device communication function neither reference specifically discloses a method for providing a different LED indication for indicating an external device communication and for indicating a moving image capturing function. However, Okino states that an indication of both a moving image capturing function (recording video and audio synchronously) and a self-timer function may be provided by LED (5) and several kinds of voice recording times (corresponding to moving image capturing) and self-timer setting times may be programmed in advance (col. 4, lines 14-38). Thus, it can be seen that Okino teaches prioritizing LED flashing times in order to provide a different indication

corresponding to the mode that the camera is operating in. Therefore, it would have been obvious for one skilled in the art to have been motivated to vary the flashing time of the LED disclosed by the combination of the Okino and Aoi references in order to indicate the external communication function when a communication with an external device is performed and to indicate the moving-image capturing function when the communication with an external device is not performed and the moving-image capturing is performed. Doing so would provide a means for allowing a user to determine which mode the camera is currently operating in by looking at an LED indicator on the front of the camera. Although the combination of the Okino and Aoi references discloses all of the limitations above it fails to state that the camera is mounted to a cradle comprising power and communications terminals.

Ohmura discloses a digital camera (6) mounted to a cradle (5); the cradle (5) has a terminal (5c,5b) to communicate with an external device (4) carrying out two-way communication (fig. 2, element 5f, power supply connector, IEEE 1394) and a power output terminal (fig. 2, element 5f, power supply connector) to output a direct voltage source (fig. 2, element 5e); the digital camera carries out two-way communication with the external device (4) via the cradle (5) (page 5, paragraphs 100-121); and the digital camera (6) has a charging function of charging a battery in the digital camera (6) by the direct voltage source input from the power output terminal of the cradle (5) when power of the digital camera (6) is off (page 6, paragraphs 118-121; fig. 7, steps S164-S168). Therefore, it would have been obvious for one skilled in the art to have been motivated to connect the camera capable of displaying multiple camera functions on an LED

indicator as disclosed by the combination of the Okino and Aoi references to a cradle comprising power and communication terminals as disclosed by Ohmura. Doing so would provide a means for recharging the camera's batteries and transmitting image data captured by the camera.

Re claim 7, it is inherent that the steps of indicating communications processing, audio recording and voice memo processing are performed when the digital camera has already been externally turned on because the camera must be on in order to perform data processing operations.

Re claim 12, the combination of the Okino and Aoi references discloses all of the limitations of claim 8 above. Additionally, Okino discloses displaying a battery charge level (col. 5, lines 3-8). However, the combination of the Okino and Aoi references does not disclose the step of indicating the battery charge processing function includes: operating the indicating device in a continuous manner until it is determined that the battery is fully charged; and ceasing operation of the indicating device when it is determined that the battery is fully charged.

Ohmura discloses an LED (5m) for displaying a charging state of a digital camera (6), wherein the LED blinks in a continuous manner until it is determined that the battery is fully charged (figure 7, step 167); and ceasing operation of the indicating device when it is determined that the battery is fully charged (fig. 7, step S169) because the LED stops blinking and remains illuminated when the battery is fully charged (page 6,

paragraphs 118-121). Therefore, it would have been obvious for one skilled in the art to have been motivated to operate the indicating device of the camera disclosed by the combination of the Okino and Aoi references in a continuous manner until it is determined that the battery is fully charged and cease operation of the indicating device when it is determined that the battery is fully charged as disclosed by Ohmura. Doing so would provide a means for indicating a battery charge-process state to a user.

Re claim 13, the combination of the Okino and Aoi references discloses all of the limitations of claim 8 above. However, the combination of the Okino and Aoi references fails to specifically disclose operating the indicating device in a blinking manner when it determined that the camera is in communication with an external device (fig. 6, step S155); operating the indicating device in an intermittent manner when it is determined that the camera may be disconnected from communication with the external device and ceasing operation of the indicating device when it is determined that the camera is disconnected from communication with the external device.

Ohmura discloses a camera (6) connected to a cradle (5) wherein a step of indicating a communications processing function includes: operating an indicating device in a blinking manner when it determined that the camera is in communication with an external device (fig. 6, step S155), operating the indicating device in an intermittent manner when it is determined that the camera may be disconnected from communication with the external device (fig. 8, step S101) because the LED blinks during transmission and communication may be interrupted by determination of the user



at any time during communication and ceasing operation of the indicating device when it is determined that the camera is disconnected from communication with the external device because it is clear that when the camera is disconnected (page 5, paragraphs 100-111). Therefore, it would have been obvious for one skilled in the art to have been motivated to operate the indicating device of the camera disclosed by the combination of the Okino and Aoi references in a blinking manner when the camera is in communication with an external device, in an intermitted manner when the camera may be disconnected from the external device and cease operation of the indicating device when it is determined that the camera is disconnected from the external device as disclosed by Ohmura. Doing so would provide a means for indicating an external device communication state to a user.

Re claim 14, Aoi states that the camera performs external communication via a USB bus (page 5, paragraph 93).

Re claims 21, 22 and 25, the combination of the Okino and Aoi references discloses all of the limitations of claims 1 and 8 above. Additionally, Okino discloses displaying a battery charge level (col. 5, lines 3-8). However, the combination fails to state that a battery charging function takes place when the camera has already been externally turned off.

However, Ohumura discloses a docking station (5) for charging a camera (6) comprising a rechargeable battery (fig. 2, docking station 5 and rechargeable battery

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6b). Ohmura states that the camera (6) is switched off prior to recharging of the battery and an indication LED (5m) is used to inform a user of the status of the battery charging (page 6, paragraphs 118-121). Therefore, it would have been obvious for one skilled in the art to have been motivated to connect the camera capable of displaying multiple camera functions on an LED indicator as disclosed by the combination of the Okino and Aoi references to a cradle comprising power and communication terminals as disclosed by Ohmura and include an indication of battery charging on the indicator of the camera. Doing so would provide a means for recharging the camera's batteries and informing the user of the status of the battery charging.

Re claim 23, Ohmura states that the digital camera (6) is turned on prior to carrying out two-way communication between the camera (6) and the image storage (4) (page 5, paragraphs 100-105).

Re claims 37, 41 and 43, although the combination of the Okino and Aoi references discloses all of the limitations of claims 1, 8 and 30 above the combination fails to specifically disclose a CPU that is configured to determine whether a power of the digital camera is turned on or off, determine whether a battery is inserted into the digital camera when it is determined that the power of the digital camera is turned off, performed a battery charge function when it is determined that the battery is inserted into the digital camera and the power of the digital camera is turned off, wherein the indicating device indicates that the battery charge function is being performed,

determine whether the digital camera is in communication connection with an external device when it is determined that the power of the digital camera is turned on, and perform the external device communication function with the external device when it is determined that the power of the digital camera is turned on and the digital camera is in communication connection with the external device, wherein the indicating device indicates that the external device communication function is being performed.

Ohmura discloses a digital camera (6) mounted to a cradle (5); the cradle (5) has a terminal (5c,5b) to communicate with an external device (4) carrying out two-way communication (fig. 2, element 5f, power supply connector, IEEE 1394) and a power output terminal (fig. 2, element 5f, power supply connector) to output a direct voltage source (fig. 2, element 5e); the digital camera carries out two-way communication with the external device (4) via the cradle (5) (page 5, paragraphs 100-121); and the digital camera (6) has a charging function of charging a battery in the digital camera (6) by the direct voltage source input from the power output terminal of the cradle (5) when power of the digital camera (6) is off (page 6, paragraphs 118-121; fig. 7, steps S164-S168). The external device (4) includes a CPU capable of determining whether a power of the digital camera (6) is turned on or off (page 6, paragraph 118), determine whether a battery is inserted into the digital camera (6) when it is determined that the power of the digital camera is turned off (page 6, paragraph 119), perform the battery charge function when it is determined that the battery is inserted into the digital camera (6) and the power of the digital camera (6) is turned off (page 6, paragraphs 120-121). Additionally, the CPU determines whether the digital camera (6) is in communication connection with

an external device (4) when it is determined that the power of the digital camera (6) is turned on, and perform the external device communication function with the external device (4) when it is determined that the power of the digital camera (6) is turned on and the digital camera (6) is in communication connection with the external device (4) (page 5, paragraphs 100-111). Therefore, it would have been obvious for one skilled in the art to have been motivated to connect the camera capable of displaying multiple camera functions on an LED indicator as disclosed by the combination of the Okino and Aoi references to a cradle comprising power and communication terminals as disclosed by Ohmura. Doing so would provide a means for recharging the camera's batteries and transmitting image data captured by the camera.

Re claim 39, Ohmura further states that the external device (4) includes a CPU capable of determining whether a power of the digital camera (6) is turned on or off (page 6, paragraph 118), determine whether a battery is inserted into the digital camera (6) when it is determined that the power of the digital camera is turned off (page 6, paragraph 119), perform the battery charge function when it is determined that the battery is inserted into the digital camera (6) and the power of the digital camera (6) is turned off (page 6, paragraphs 120-121). Additionally, the CPU determines whether the digital camera (6) is in communication connection with an external device (4) when it is determined that the power of the digital camera (6) is turned on, and perform the external device communication function with the external device (4) when it is determined that the power of the digital camera (6) is turned on and the digital camera

(6) is in communication connection with the external device (4) (page 5, paragraphs 100-111).

**Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. in view of Aoi et al. and further in view of Matsuo US 6,526,293.**

Re claim 29, the combination of the Okino and Aoi references discloses all of the limitations of claim 1 above. Additionally, Aoi discloses that an LED display displays a battery charge status . However, the Okino and Aoi references do not disclose that the indicating device is configured to indicate the battery charging function by operating in a continuous manner until the battery is fully charged and ceasing operation when the battery is fully charged.

However, Matsuo discloses that during battery charging, an LED is turned on so as to inform a user of charging (col. 1, lines 19-21); and a charge operation mode informs a user of charging by varying the intensity of light. One of ordinary skill in the art would have configured an LED to vary in intensity in order to inform a user of a charging condition. As a result, it would have been obvious to one of ordinary skill in the art at the time of the invention to have operated a battery charging indicator by operating in a continuous manner until the battery is fully charged and ceasing operation when the battery is fully charged in order to inform a use of a charging condition.

**Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Okino et al. in view of Aoi et al. and further in view of Kawamura US 5,784,105.**

Re claim 32, the combination of the Okino and Aoi references discloses all of the limitations of claim 30 above. However, the combination fails to specifically state that the digital camera is configured to perform the battery charging function when the digital camera is manually turned off.

Kawamura discloses a video camera including a built-in secondary battery. Kawamura states that when a battery charger (8) is connected to the video camera body (1) if the main switch (4) is in its off state the supply of electric power from the battery charger (8) acts to charge the secondary battery (2) (col. 4, lines 28-45). Therefore, it would have been obvious for one skilled in the art to have been motivated to charge a battery in the digital camera disclosed by the combination of the Okino and Aoi references only when the camera is turned off as disclosed by Kawamura. Doing so would provide a means to allow all the power supplied from a battery charger to be used to charge the battery.

***Allowable Subject Matter***

**Claims 38, 42 and 44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

The following is a statement of reasons for the indication of allowable subject matter:

Re claims 38, 42 and 44, the prior art fails to teach or suggest, "A digital camera which has a first function of self-timer image-capturing function and a second function different from the first function and a method for indicating a plurality of functions of a camera, the digital camera comprising: an indicating device which is arranged on a front of the digital camera, indicates a situation in self-timer image-capturing by at least one of lighting and blinking, and indicates an operation situation of the second function, wherein the second function is at least one of an external device communication function, a battery charging function or a moving-image capturing function, wherein the indicating device indicates the external device communication function when a communication with an external device is performed, and wherein the indicating device indicates the moving-image capturing function when the communication with the external device is not performed and the moving-image capturing is performed, further comprising a CPU, wherein the CPU is configured to determine whether a power of the digital camera is turned on or off, determine whether a battery is inserted into the digital camera when it is determined that the power of the digital camera is turned off, perform the battery charge function when it is determined that the battery is inserted into the digital camera and the power of the digital camera is turned off, wherein the indicating device indicates that the battery charge function is being performed, determine whether

the digital camera is in communication connection with an external device when it is determined that the power of the digital camera is turned on, and perform the external device communication function with the external device when it is determined that the power of the digital camera is turned on and the digital camera is in communication connection with the external device, wherein the indicating device indicates that the external device communication is being performed, wherein the CPU is further configured to determine whether the digital camera is in image capturing mode when it is determined that the power of the digital camera is turned on and the digital camera is not in communication with the external device, **perform a playback processing function when it is determined that the power of the digital camera is turned on, the digital camera is not in communication connection with the external device and the digital camera is not in image capture mode, determine whether the digital camera is in a self-timer image-capturing mode, a moving image-capturing mode or a voice recording mode when it is determined that the power of the digital camera is turned on, the digital camera is not in communication connection with the external device and the digital camera is in image capturing mode, perform the self-timer image-capturing function when it is determined that the power of the digital camera is turned on, the digital camera is not in communication connection with the external device and the digital camera is in the self-timer image-capturing mode, wherein the indicating device indicates that the self-timer image-capturing function is being performed, perform the moving image-capturing function when it is determined that the power of the digital**



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camera is turned on, the digital camera is not in communication connection with the external device and the digital camera is in the moving-image capturing mode, wherein the indicating device indicates that the moving-image capturing function is being performed, and perform a voice recording function when it is determined that the power of the digital camera is turned on, the digital camera is not in communication connection with the external device and the digital camera is in the voice recording mode, wherein the indicating device indicates that the voice recording function is being performed”.

**Claims 6 and 40 are allowed.**

The following is an examiner's statement of reasons for allowance:

Re claims 6 and 40, the prior art fails to teach or suggest, “A digital camera, wherein: the digital camera has a self-timer image-capturing function; the digital camera is mounted to a cradle; the cradle has a terminal to communicate with an external device carrying out two-way communication, and a power output terminal to output a direct voltage source; the digital camera carries out two-way communication with the external device via the cradle; the digital camera has a charging function of charging a battery in the digital camera by the direct voltage source input from the power output terminal of the cradle when power of the digital camera is off; and the digital camera comprises a first indicating device which is arranged on a front of the digital camera,

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indicates a situation in self-timer image-capturing by at least one of lighting and blinking, and indicates a charging situation by the charging function, wherein the digital camera further comprises a second indicating device which is arranged on a rear of the digital camera and indicates the charging situation by the charging function; and a detecting device which detects mounting/non-mounting of the digital camera to the cradle, **wherein when the detecting device detects mounting to the cradle, the charging situation of the digital camera is indicated by the first indicating device, and when the detecting device detects non-mounting to the cradle, the charging situation of the digital camera is indicated by the second indicating device on the rear of the camera**".

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Sasagawa (US 6,704,506) discloses an illuminant-equipped camera. The information regarding indicators located on the front of a camera is relevant material.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contacts***

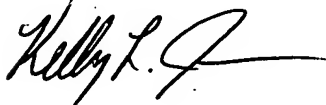
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kelly L. Jerabek whose telephone number is (571) 272-7312. The examiner can normally be reached on Monday - Friday (8:00 AM - 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for submitting all Official communications is (571)-273-8300. The fax phone number for

submitting informal communications such as drafts, proposed amendments, etc., may be faxed directly to the Examiner at (571) 273-7312.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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